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Operation and adjustment

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(2) Adjustment of various leveling switches and disable switches

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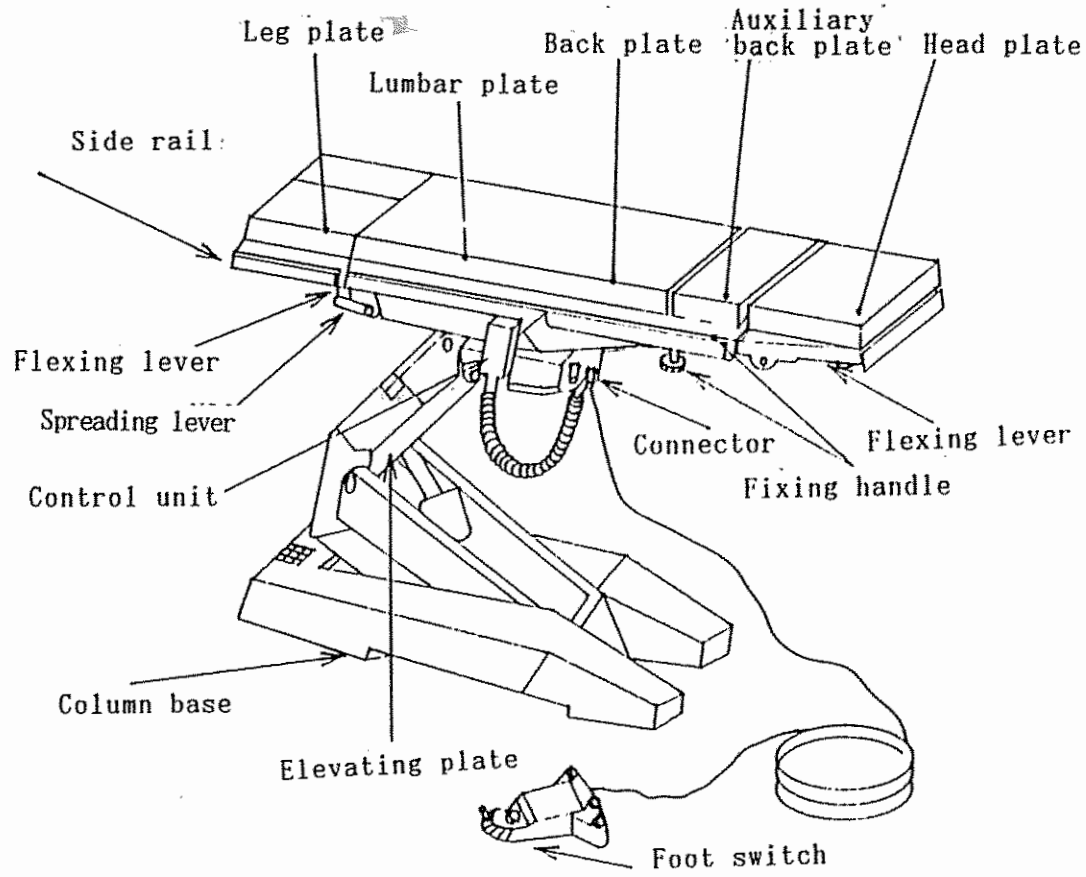
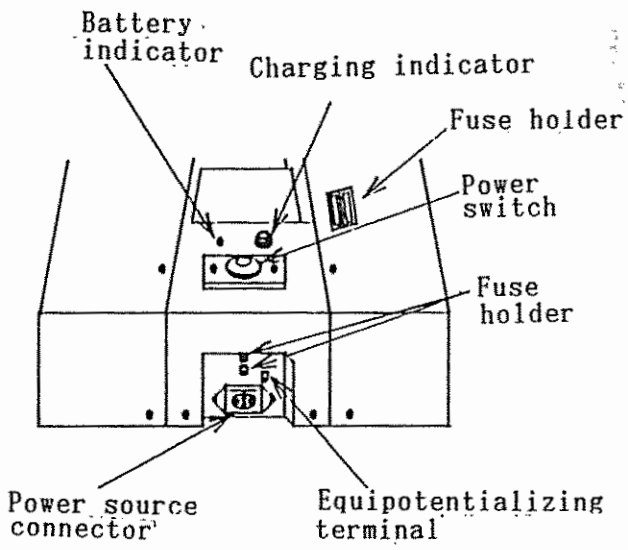
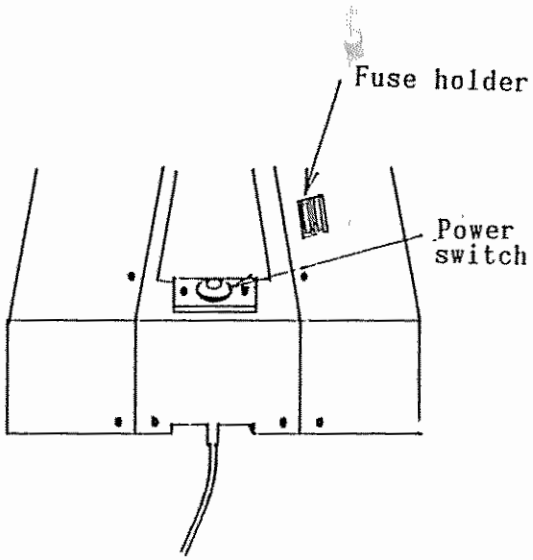
General view — parts identification





7200BX/7200B

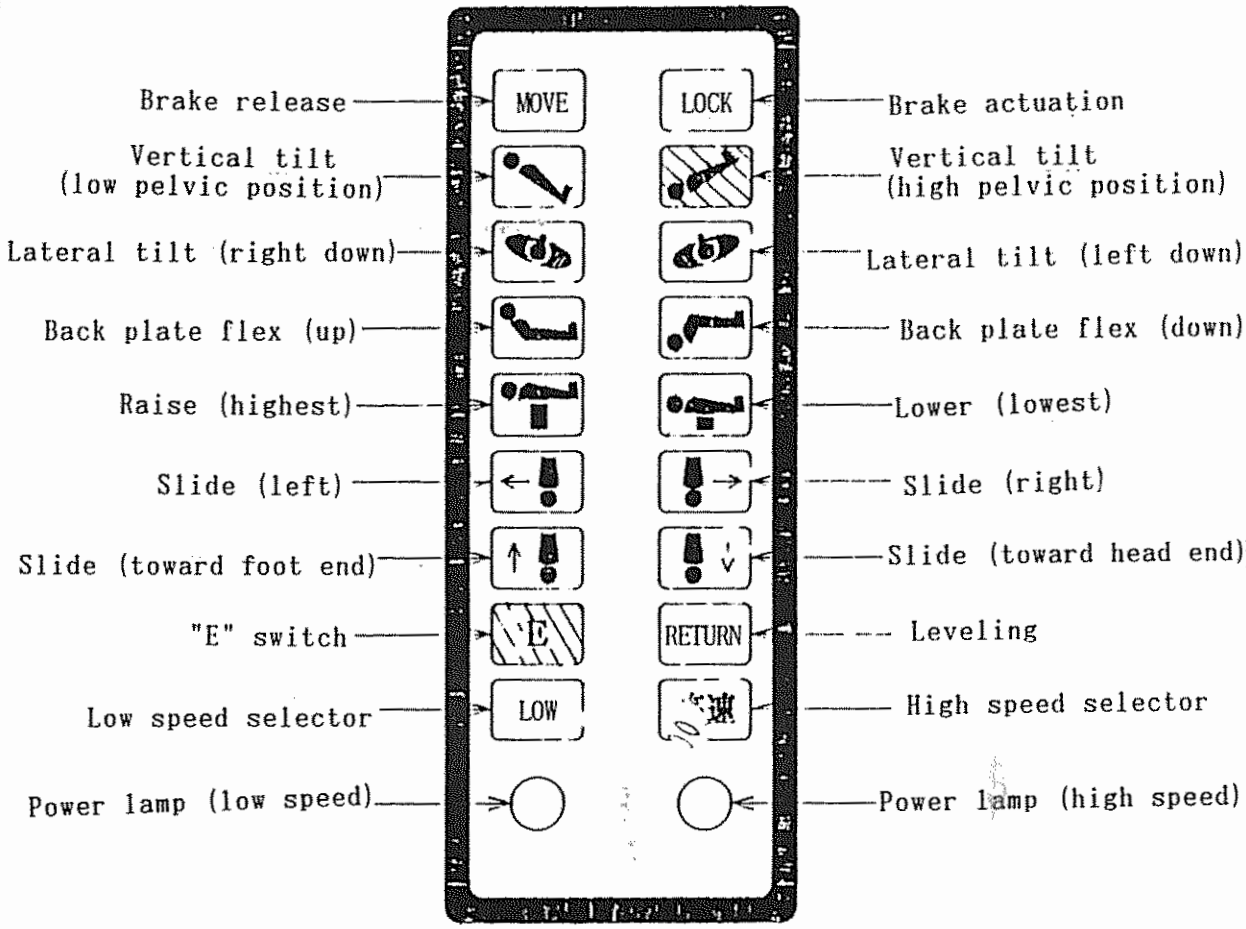


7200X/7200

Fig. 1

Disc No.101 File Name: M2BXTR-3

Control unit - parts identification



MEMO

- Slide features are available only on Model 7200BX/7200X.
- An appropriate power lamp comes on when power is applied.

Fig. 2

Disc No.101 File Name: M2BXTR-4

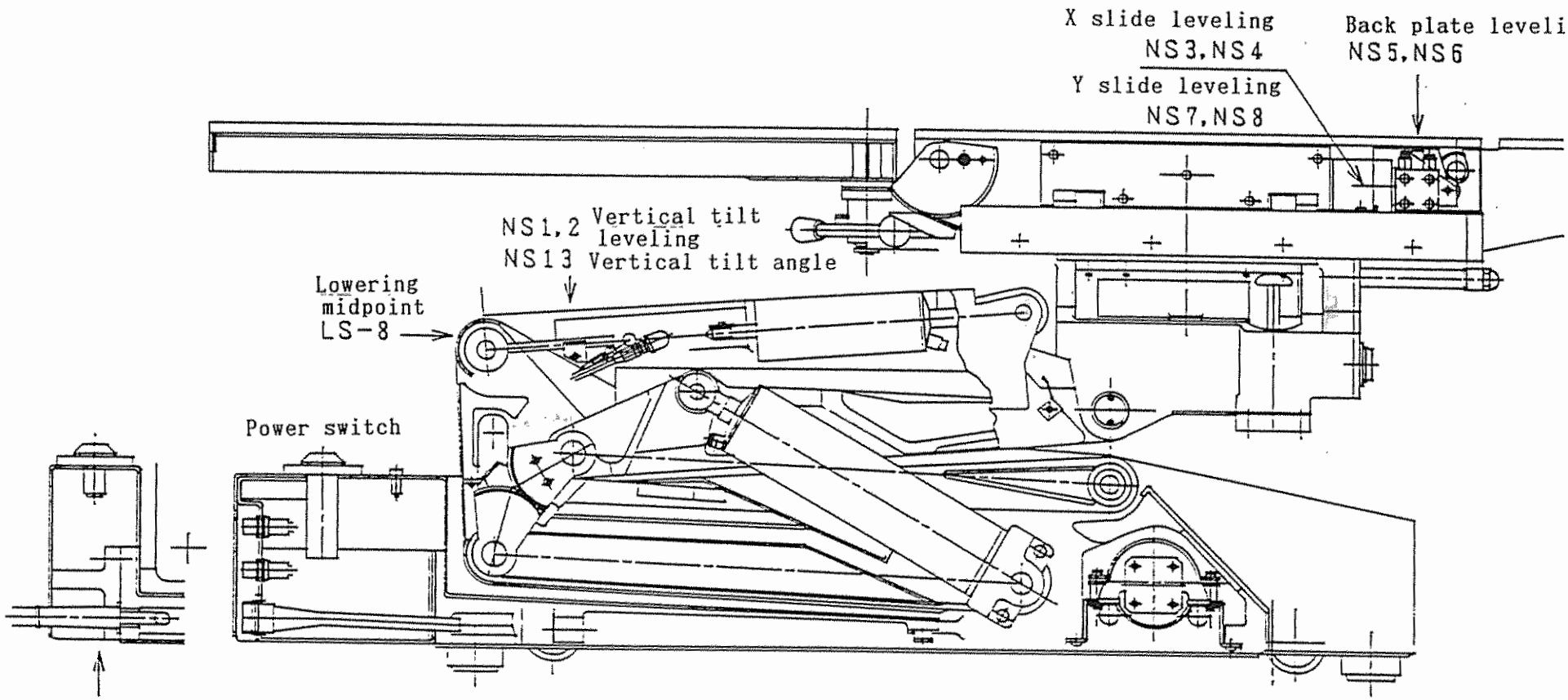


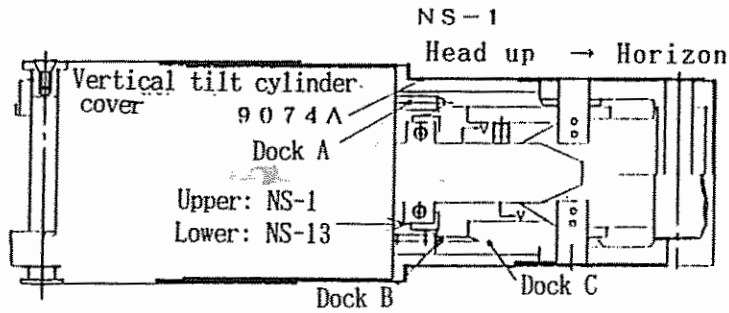
Fig. 1A

MST-7200BX GENERAL SIDE VIEW

Drawn 4/7/96

Disc No.101 File Name: M2BX-3A

VERTICAL TILT SECTION



Upper: NS-2 Horizontal ← Head down
Lower: NS-13

S6GL-13 Leveling to prevent contact with column base (vertical tilt angle)

LATERAL TILT SECTION

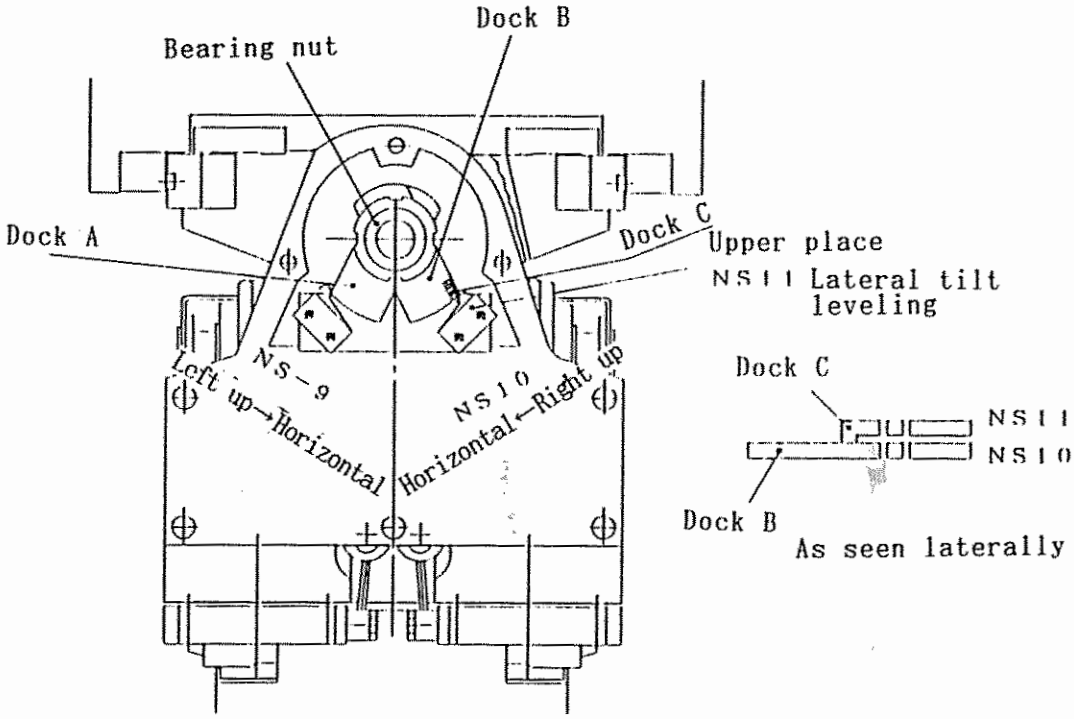
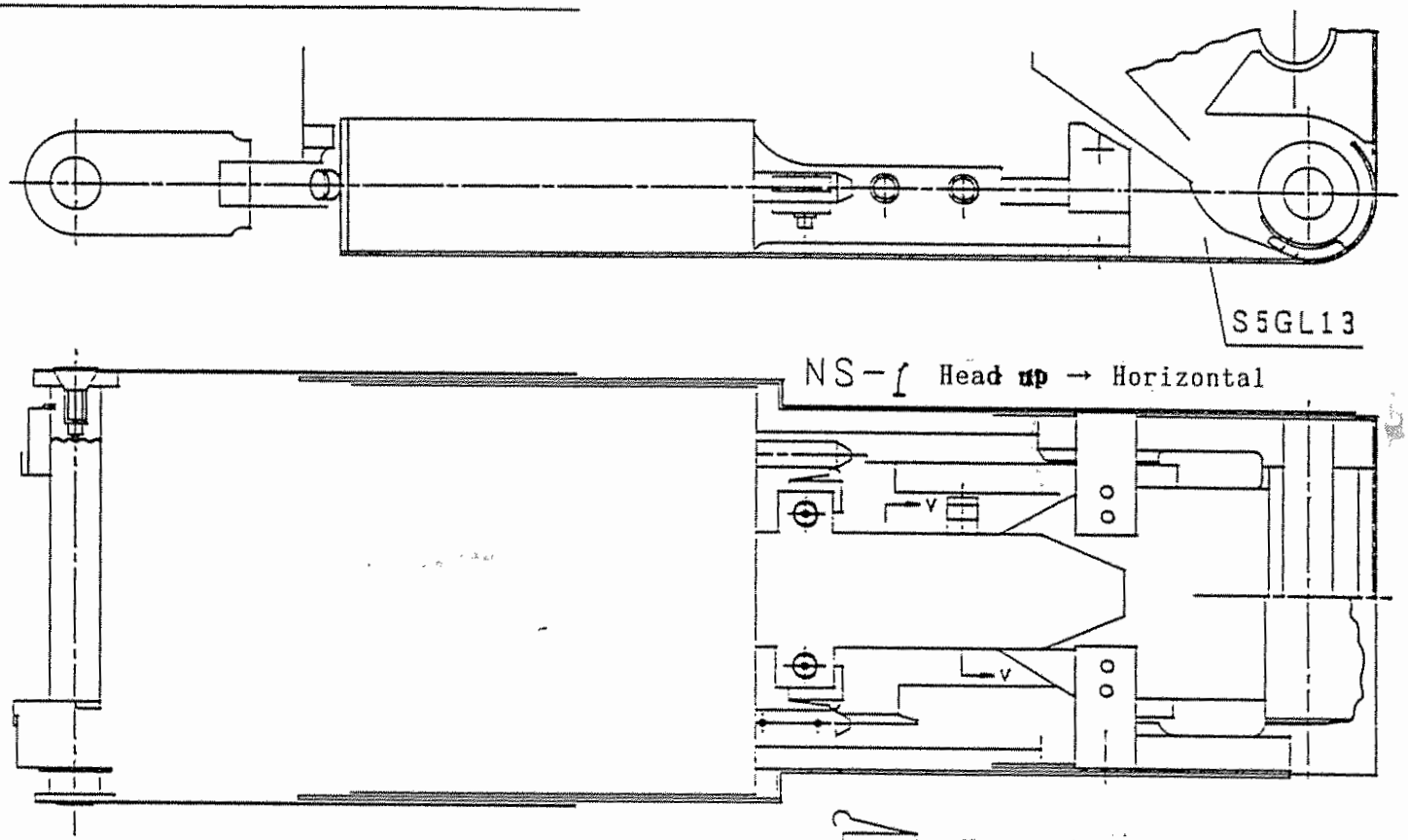


Fig. 1B

MST-7200BX VERTICAL TILT SECTION/LATERAL TILT SECTION

Disc No.101 File Name: M2BX-3B

MST-7200 VERTICAL TILT SECTION - EXTERIOR VIEW



Upper: NS-2 Horizontal → Head down

Lower: NS-13

S5GL-13 Leveling to prevent contact with column base (vertical tilt angle)

Fig. 12

Drawn 4/16/96 Disc No.101 File Name: M2BXTR-13.

OPERATION AND ADJUSTMENT

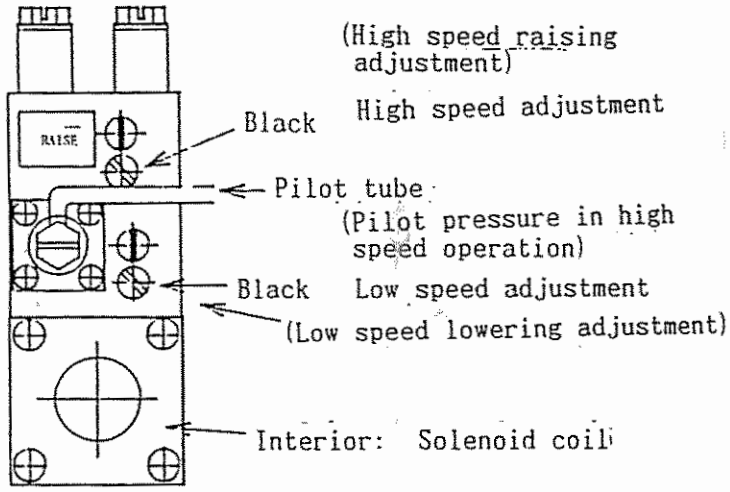
(1) Adjustment of speed

To change the speed of the back plate operation, vertical tilt, lateral tilt, elevation, X sliding or Y sliding of the operating table, remove the cover on the right side of the column base as seen from the head and adjust an appropriate speed adjusting screw (needle) of the miniature valve concerned. (See FIGs 4 and 5.)

In this case, the opposite side is:

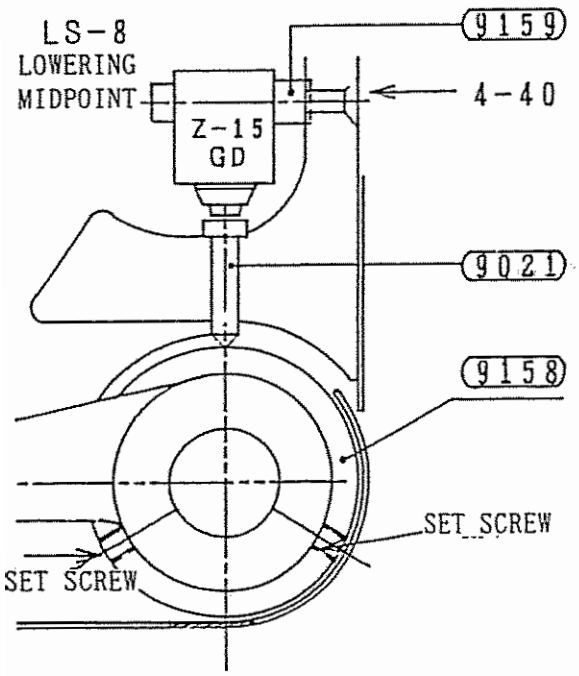
Upper place: High speed lowering

Lower place: Low speed raising



(2) Adjustment of various leveling switches and disable switches

(2-1) Adjustment of the lowering midpoint switch LS-8

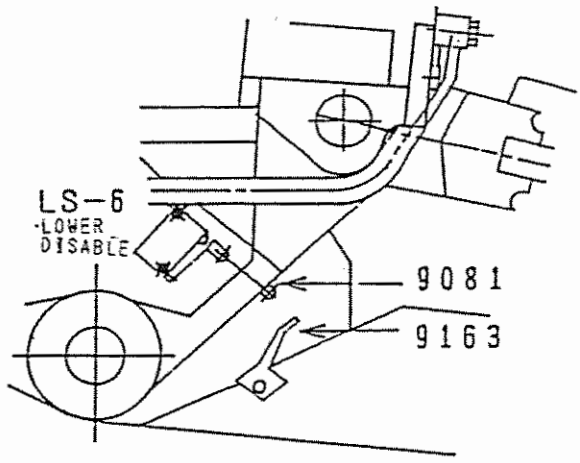


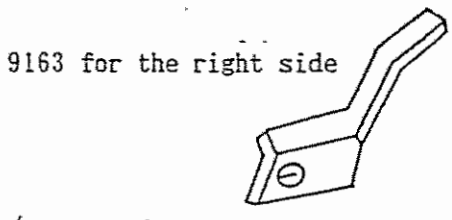
The lowering midpoint switch is located at the triangle link on the column. This switch temporarily stops the table top from lowering when it is tilted vertically or laterally.

Loosen the set screws, rotate the dock (9158) and adjust so that LS-8 (Z-15GD) will be pressed when the table top is 620mm above the floor.

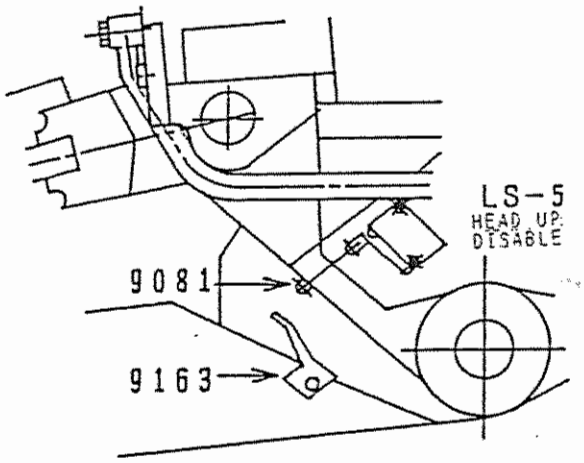
(2-2) Adjustment of the lower disable switch LS-6

Lower the table top to the lowest position. Then adjust the bend of 9163 so that 9081 will be pressed first, with the head of the table top 4° up, and the microswitch LS-6 will be pressed in turn.



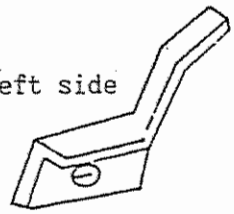


(2-3) Adjustment of the head up disable switch LS-5



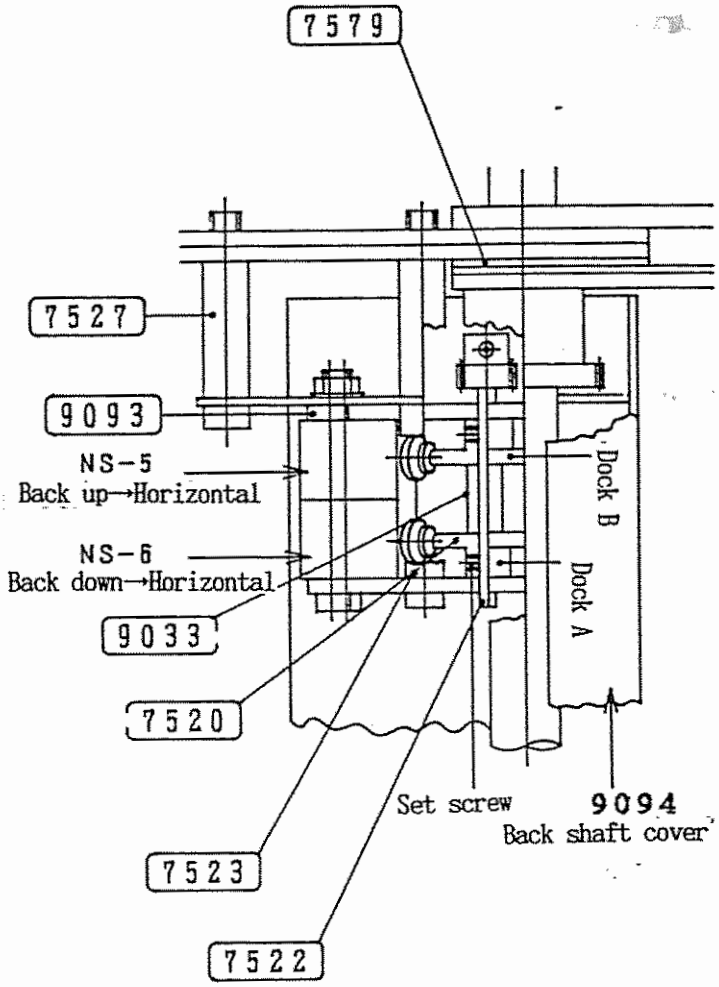
Lower the table top to the lowest position. Then adjust the bend of 9163 so that 9081 will be pressed first, with the head of the table top 4° up, and the microswitch LS-5 will be pressed in turn.

9163 for the left side



(as seen from the head)

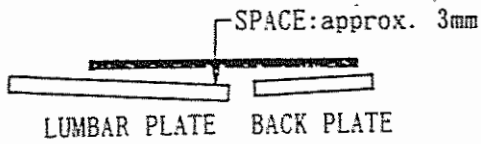
(2-4) Adjustment of the back plate leveling switches



Adjustment of NS-6

(BACK DOWN → HORIZONTAL)

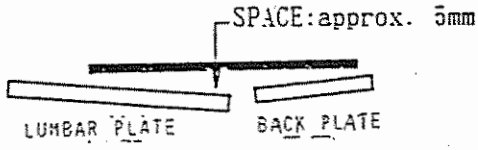
Loosen the set screw, rotate Dock A and adjust so that NS-6 will be pressed by Dock A when the back plate is slightly up.



Adjustment of NS-5

(BACK UP → HORIZONTAL)

Loosen the set screw, rotate Dock B and adjust so that NS-5 will no longer be pressed by Dock B when the back plate is slightly up.

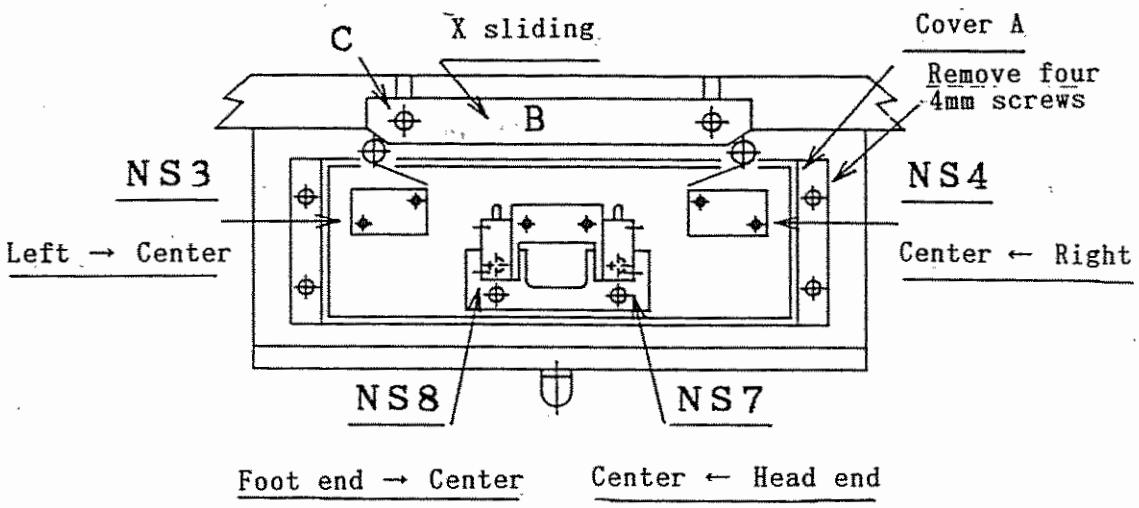


Note:

If the difference between DOWN → HORIZONTAL and UP → HORIZONTAL is too small, the table top will not stop in the horizontal position but move like a seesaw. Adjustment must be made so that it will stop soon enough.

(2-5) Centering of X sliding and Y sliding

Remove the lumbar plate and take off Cover A shown in the illustration below. Make sure that the roller of the switch does not come into contact with the cover when reattaching the cover .



X sliding

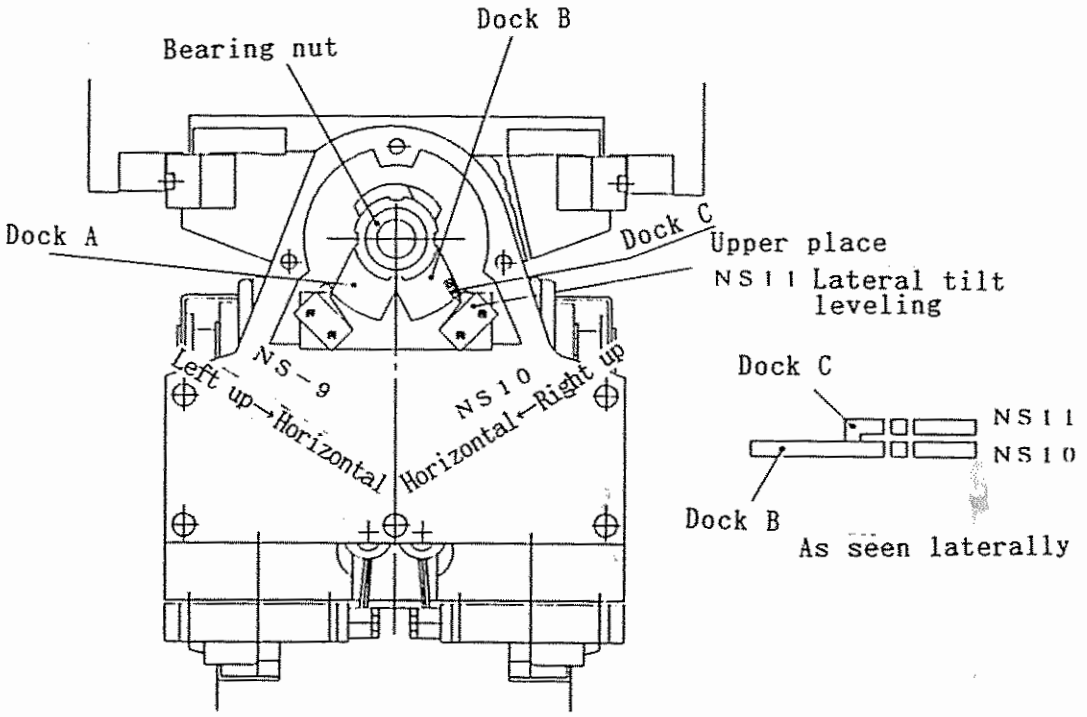
Loosen the two bolts (C) and slide the X sliding dock to the left or right to move the center position.

When the table top moves like a seesaw, slightly pull both of the two centering docks (upper and lower) or NS3 and NS4 switches toward you.

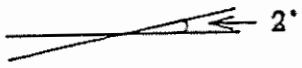
Y sliding

The table will stop in the head direction when NS7 switch is slightly lowered, or in the foot direction when NS8 switch is slightly raised. When the table top moves like a seesaw, lower NS7 or raise NS8 more to stop the seesaw movement.

(2-6) Adjustment of the lateral tilt leveling switches



Adjustment of NS-10 (RIGHT UP → HORIZONTAL)

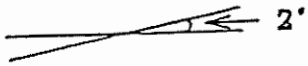


Loosen the bearing nut a little, rotate Dock B and adjust so that NS-10 will no longer be pressed when the right side of the table top is 2° up. Tighten the bearing nut securely after adjustment.

Adjustment of NS-9 (LEFT UP → HORIZONTAL)

Loosen the bearing nut a little, rotate Dock A and adjust so that NS-9 will no longer be pressed when the left side of the table top is 2° up. Tighten the bearing nut securely after adjustment.

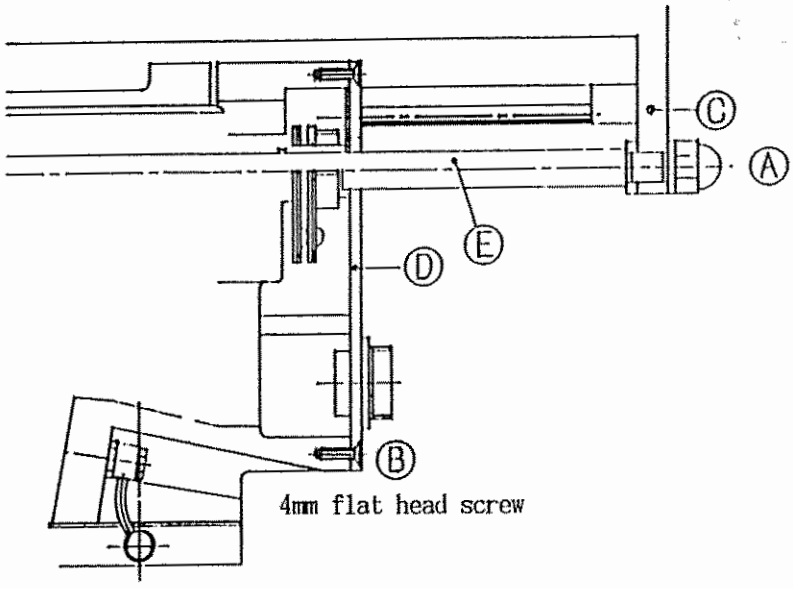
Adjustment of NS-11 (LATERAL TILT LEVELING)



When NS-10 is no longer pressed, adjust Dock C so that NS-11 will be pressed.

When the head of the table top is down by 20° or more, the table top will not go down unless NS-11 has been pressed (i.e. if the table top remains tilted laterally).

Supplementary explanation:



Lateral tilt leveling and adjustment of NS-11 with the front connector panel attached

① Slide the table top fully in the head direction using an appropriate control switch.

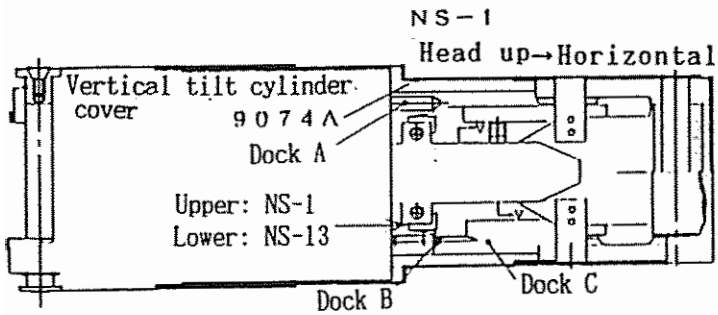
② Remove the 12mm cap nut Ⓐ and return the table top to the center position using the control switch.

There should be a gap between Ⓒ and Ⓔ, through which the panel Ⓓ can be removed downward.

③ Remove eight 4mm flat head screws Ⓑ and pull down the panel Ⓓ through the gap between Ⓒ and Ⓔ to the line drawn inside.

④ Now the lateral tilt switches can be adjusted.

(2-7) Adjustment of the vertical tilt leveling switches



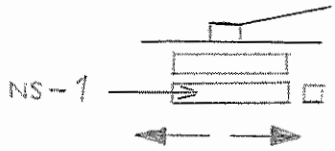
Upper: NS-2 Horizontal←Head down
Lower: NS-13

S5GL-13 Leveling to prevent contact with column base (vertical tilt angle)

Remove 9074A vertical tilt cylinder cover.

Adjustment of NS-1 (HEAD UP → HORIZONTAL)

Adjust the support on which NS-1 is mounted so that NS-1 will be pressed by Dock A when the head of the table top is 2° up.



Loosen the 4mm cap bolt a little to adjust. Tighten

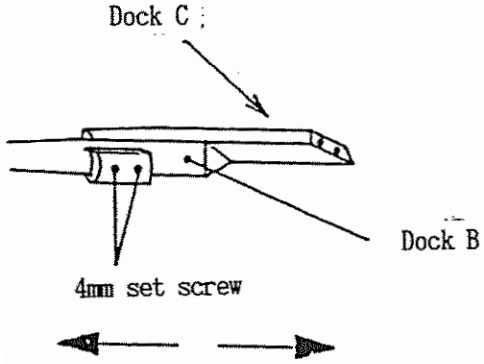
it securely after adjustment. (See FIG 12.)

Adjustment of NS-2 (HEAD DOWN → HORIZONTAL)

Adjust the support on which NS-2 is mounted so that NS-2 in the upper place will no longer be pressed when the head of the table top is 2° down.

Adjustment of NS-13 (VERTICAL TILT ANGLE)

Adjust Dock C so that NS-13 in the lower place will be pressed by Dock C when the head of the table top is 20° down.



Loosen the 4mm set screw and adjust Dock C by moving it back and forth.

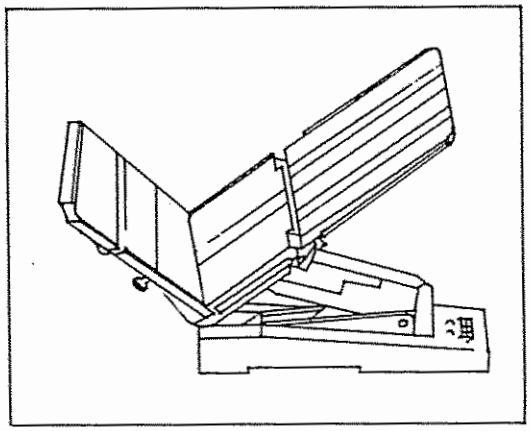
Tighten the set screw securely after adjustment. (See FIG 12.)

(2-8) Safety feature of limiting the table top positioning and release

If the table is lowered with the table top tilted, it might hit against the column base and get damaged. To avoid this, the table has a safety feature incorporated to limit its lowering, lateral tilting and vertical tilting to a certain degree. Certain functions are not available depending on positioning.

Example 1.

The table stopped halfway when lowered with the table top in the lateral tilt and high pelvic position.



How to release the safety feature:

The table can be lowered to the lowest position in either of the following cases:

1) Activate the vertical tilt and low pelvic position to put the table top to the near-horizontal position.
2) Press the lateral tilt switch to put the table top to the horizontal position. In this case, the table top will not achieve the maximum lateral tilt position.
3) Press the leveling switch.

Caution

- Do not press the leveling switch for this purpose when a patient is on the table top.

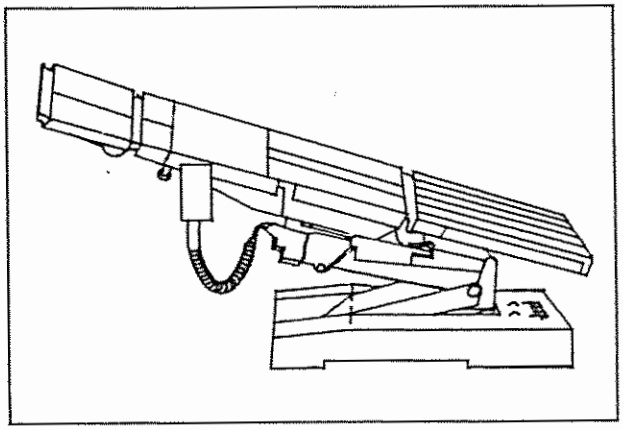
Memo

- The vertical tilt and high pelvic position will be achieved up to 20° (10°), when the table top is above the floor by 620 mm or less. However, if lateral tilt is not operated , the vertical tilt and high pelvic position will be achieved up to 45° (30°).
- When the table is in the lateral tilt and high pelvic position of less than 20° (15°) to the level condition, in the lateral tilt and low pelvic position of less than 5° to the level condition, or when lateral tilt is not operated, the table can be lowered to the lowest position.

※ The figures in ( ) apply to 7200B/7200.

Example 2

The table stopped halfway when the table is lowered with the table top in the vertical tilt and low pelvic position.



How to release the safety feature:

The table can be lowered to the lowest position in either of the following cases:

1) Activate he vertical tilt and high pelvic position to put the table top to the near-horizontal position.
2) Press the leveling switch.

Caution

● Do not press the leveling switch for this purpose when a patient is on the table top.

Memo

● The maximum angle of the vertical tilt and low pelvic position is 20° , but this will vary slightly depending on the elevated position of the table top.

In the lowest position, this feature cannot be actuated.

Checking the proper limiting operation - MST-7200X, 7200BX

1. Lower disable

1-1 Procedure: Lower the table top with head up about 15° .

1) LS6 should activate to disable lowering.

2) At the same time LS5 should activate to disable head up

operation.

1-2. Procedure: Lower the table top until the lowering midpoint switch LS8 activates (620mm).

The vertical tilt angle switch NS13 activates (head down 20° or more).

The lateral tilt leveling switch NS11 does not activate (lateral tilt 5° left up or right up) and the table top should not go down further.

2. Head down disable

Procedure: The lateral tilt leveling switch NS11 does not activate (lateral tilt 5° left up or right up).

The vertical tilt angle switch NS13 activates (head down 20° or more).

Lower the table top to the lowering midpoint, and head down operation should not activate.

3. Lateral tilt disable

Procedure: The vertical tilt angle switch NS13 activates (head down 20° or less).

The lateral tilt leveling switch NS11 does not activate (lateral tilt 10° left up or right up).

Lower the table top to the lowering midpoint, and lateral tilt leveling should activate when the left

up switch or the right up switch is operated.

4. Lateral tilt operation

Procedure: Operate vertical and lateral tilt leveling.

Lower the table top until the lowering midpoint switch LS8 activates.

The table top should be operable up to 30° left up and right up respectively.

5. Head down operation

Procedure: Operate lateral tilt leveling (the lateral tilt levering switch NS11 activates).

Lower the table top until the lowering midpoint switch LS8 activates. Lower the table head until the vertical tilt angle switch NS13 activates (head down 20° or less). Lower the table top to the lowest position.

Check that maximal head down position can be achieved.

6. Lowering operation

Procedure: Operate lateral tilt leveling (the lateral tilt leveling switch NS11 activates).

Lower the table head maximally (lower the head further even after the vertical tilt angle switch

NS13 has activated).

Check that the table top can be lowered to the lowest position.

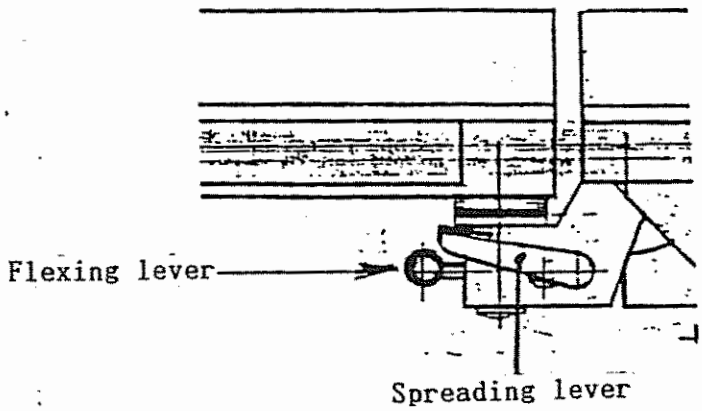
The operation of the leg plate - MST-7200 series

The spreading lever

While pushing the spreading lever downward, move the leg plates horizontally. Release the lever, and the leg plates will be fixed as they are.

The flexing lever

While pushing the flexing lever upward, move the leg plates downward. Release the lever, and the leg plates will be fixed as they are. To push the leg plates upward, it is not necessary to push the flexing lever upward. Only push up the leg plates.



The spreading lever

Push the spreading lever downward and spread the leg plates apart a little. Release the lever, and the leg plates can be pulled up to be detached.

To reattach the leg plates, align the plates with the table and push the spreading lever downward. Release the lever, and the leg plates will be attached securely.

The flexing lever

Push the flexing lever upward, and the engaging rack will be released. Then the leg plates can be adjusted upward or downward manually.